



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/877,248	06/11/2001	Jang-hoon Yoo	1293.1213	7975

21171 7590 03/25/2004

STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

HINDI, NABIL Z

ART UNIT	PAPER NUMBER
----------	--------------

2655

DATE MAILED: 03/25/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/877,248

Applicant(s)

YOO ET AL

Examiner

NABIL Z HINDI

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,8-11,14,15,19-22,24-26,29,30 and 32-34 is/are rejected.
- 7) ☒ Claim(s) 2,6,7,12,13,16-18,23,27,28 and 31 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5 and 6.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Art Unit: 2655

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 9, 11, 14, 15, 20, 22, 24-26, 29, 30, 32, 33 and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamada et al (6574182).

The reference shows an optical disk recording and reproducing apparatus for reading a first and second disks with different formats 11, 110 comprising: a light module for selectively emitting a first and second light beam having different wavelengths 1, a holographic light coupler guiding the light beam to a common path 6, an optical path changing unit to alter the common path of the reflected light beam 3 or 5, an objective lens 7, and photo detection means 9. The limitations of claim 26 could be found in figs 4B and 4C wherein the light beam is diffracted into a non-zero order (+/- first order) to be focused on the corresponding disk and reflected back to the photo detection means 9.

With respect to the limitation of claim 11 see figs 4a-4c.

With respect to the limitation of claim 14. the holographic element having stepped grating is employed within an apparatus with two light emitting sources ranging from 630-nm to 730nm. Therefor the depth of such grating must inherently fall within the claimed range.

Art Unit: 2655

With respect to the limitations of claims 15 and 19 see figs 2a-2c.

With respect to the limitation of claim 20 see element 9.

With respect to the limitations of claims 22 and 24 see figs 2B and 2C showing the use of a non-zero order light beam.

With respect to the limitation of claim 25 see element 7 having a spherical surface.

With respect to the limitations of claims 29, 30, 32, 33 and 34. the reference shows the use of a non-zero order light beam in figs 4B and 4C. The common light path-changing element is shown as elements 5 or 3 reflecting the reflected light beam to the photo detection means 9.

Claims 1, 3-5, 8-11, 14, 15, 19-22, 24-26, 29, 30 and 32-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Abe et al (6084843).

The reference shows an optical disk recording and reproducing apparatus reading different formatted disks 41a, 41b, a light module selectively emitting a first and second reading beams having different wavelengths 21, a holographic element guiding the light beams into a common path 25, an optical path changing element 23, an objective lens 26 and photo detection means 28. The limitations of claim 26 is found in figs 20, 21 31 and 32 showing the use of a non-zero light beam being focused on the corresponding disk and reflected back to the photo detection element.

With respect to the limitation of claim 3. the reference shows the use of a holographic element 25 wherein a non-perpendicular light beam is incident thereon 21A and transmitted into a common path (focusing direction).

Art Unit: 2655

With respect to the limitations of claims 4 and 14. The holographic element having stepped grating is employed within an apparatus with two light emitting sources ranging from 630-nm to 730nm. Therefor the depth of such grating must inherently fall within the claimed range see figs 14-16.

With respect to the limitation of claim 5 see figs 14-16.

With respect to the limitations of claims 8 and 21 see fig 4 elements 114 and 116.

With respect to the limitation of claim 10 see elements 21a, 21b and 25.

With respect to the limitation of claim 11 see figs 18-21.

With respect to the limitations of claims 15 and 19 see fig 14.

With respect to the limitation of claim 20 see fig 4 element 120.

With respect to the limitations of claims 22 and 24 see figs 20 and 21.

With respect to the limitation of claim 25 see element 26.

With respect to the limitations of claims 29, 30, 32, 33 and 34 see figs 20 and 21 regarding the first order light beam and element 114.

Claims 2, 6, 7, 12, 13, 16-18, 23, 27, 28, and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

None of the cited prior art shows the objective lens structure as claimed, adjusting the hologram coupler position based on positional tolerance between the first and second light sources, the zero percentage transmittance and the holographic pattern depth difference

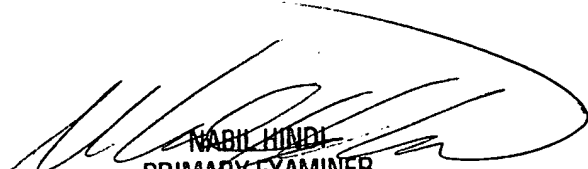
Application/Control Number: 09/877,248

Page 5

Art Unit: 2655

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. 6594042. and 6674709.

Any inquiry concerning this communication should be directed to NABIL Z HINDI at telephone number (703) 308-1555.


NABIL HINDI
PRIMARY EXAMINER
GROUP 2502
2/15